Research Assistant

UC Santa Barbara, Department of Electrical and Computer Engineering (June 1985-June1990). Contract: Gallium Arsenide Design Principles. Sponsor: Defense Advanced Research Projects Agency. Principal Investigators: Dr. Stephen I. Long and Dr. Steven E. Butner. Participated in the design and construction of a functional IC tester for testing GaAs digital ICs at speeds up to 1 GHz. Responsible for the overall architecture of the tester and the design and implementation of a custom GaAs IC used in its construction. Designed, probed and characterized numerous GaAs test structures. Conducted a study of packaging and interconnection techniques for high speed GaAs logic. Assisted in the development of a graduate level course in GaAs digital IC design. Assisted in teaching DARPA sponsored course on teaching GaAs digital IC design.

Associate Engineer

Burroughs Corporation (now UNISYS), Computer Systems Group, Mission Viejo, CA (September 1980-January 1983). Participated in the design and debugging of a new, large systems main frame computer, utilizing advanced technologies and design methodologies. Responsible for debugging the I/O processor, including the development of diagnostic and maintenance software.

Visiting Lecturer

UC Santa Barbara, Department of Electrical and Computer Engineering (September 1986-December 1986). *Taught upper division undergraduate course on computer architecture*.

Instructor

University of California Extension Service (august 1985). *Taught high-speed packaging and interconnect section of industry-oriented UC extension course on high speed gallium arsenide ICs.* 

Student Engineer

The Aerospace Corp., Space Computers Laboratory (June 1979-September 1979). Designed, constructed and debugged hardware to interface an I/O subsystem to a satellite-based microcomputer system.